

## Patent Claims

1. Insole, which is essentially adapted to the profile of a human foot and in the central foot section exhibits an elastically deformable dome-like arch (2) facing the foot,  
  
**characterised in that**  
  
the insole (1) in the region of the elastically deformable arch (2) exhibits at least one ventilation opening (3), which during walking and in conjunction with the elastically deformable arch (2) provides ventilation of the shoe interior.
2. Insole according to Claim 1, **characterised in that** the insole (1) is an insertable sole.
3. Insole according to Claim 1 or 2, **characterised in that** the ventilation openings (3) are formed by holes, which are punched in the region of the elastically deformable arch (2) in the insole (1).
4. Insole according to one of the Claims 1 to 3, **characterised in that** the insole (1) exhibits at least twenty ventilation holes.
5. Insole according to one of the Claims 1 to 4, **characterised in that** the insole (1) exhibits grooves (4) on its underside, via which ventilated air from the shoe interior is exchanged for outside air.
6. Insole according to Claim 5, **characterised in that** the ventilation grooves (4) run essentially radially from the arch (2) to the outer edge of the insole (1).
7. Insole according to one of the Claims 1 to 6, **characterised in that** the insole (1) exhibits a region (5, 6) in its areas at the heel and ball of the foot which is formed from a rubber mixture that possesses damping properties.
8. Insole according to one of the Claims 1 to 7, **characterised in that** at least one web (13) is provided on the arch (2).
9. Insole according to one of the Claims 1 to 8, **characterised in that** the insole consists of an elastic plastic material.
10. Insole according to one of the Claims 1 to 9, **characterised in that** the insole has a surface (8) formed by a textile on its side facing the foot.

11. Shoe with an insole (1) according to one of the Claims 1 to 10.
12. Shoe according to Claim 11, **characterised in that** the insole (1) exhibits grooves (4) via which ventilated air from the shoe interior is exchanged for outside air, wherein the grooves of the insole (1) correspond with air ducts through which the air ventilated via the grooves (4) is passed along a side outer wall of the shoe (12) to the outside.
13. Shoe according to Claim 11 or 12, **characterised in that** the air passed through the grooves (4) due to the deformation of the elastically deformable arch (2) is passed through a gas-permeable membrane (10) to the outside.
14. Shoe according to Claim 13, **characterised in that** the membrane (10) is at least fitted to the points of the ventilation grooves on the shoe (12) ending at the shoe.
15. Shoe according to one of the Claims 11 to 14, **characterised in that** air from an area outside of the shoe is passed into the shoe interior through a gas-permeable membrane (10) via the ventilation grooves (4) during the return to original shape of the elastically deformable arch (2).